

Position Description

Information Systems Comprehensive Services Senior Educational Communications Board

Position Summary

This position provides a broad range of support of ECB's broadcast information technology (BIT) unit, BIT-related application development and maintenance of systems, as well as tertiary support services related to ECB's internet/website presence and desktop support. This position is assigned the sole responsibility of maintaining , updating, and managing the discrepancy reporting system and all related application development responsibilities. This position also oversees the conversion and transcoding of media files, provides support for automation of functions related to broadcasting (on-air graphics, on-air billboards, etc.), and provides recurring support for daily operations center operations.

This position operates under general supervision and reports to the Broadcast IT Manager, however a significant portion of this position's responsibilities are performed under the direction of the Operations Center Manager. This position represents Wisconsin Public Broadcasting with civil, professional, and positive actions and demeanor and helps to ensure a workplace free of harassment and discrimination.

Goals and Worker Activities

40% A. Systems Development Services

A1. Maintain web-based Discrepancy Reporting system(s) using PHP, Java, or similar, for development, testing and deployment of upgrades and updates.

A2. Determine application feasibility from technical perspectives.

A3. Develop and evaluate application alternatives that solve the needs of the agency and its constituents.

A4. Debug and resolve errors in application functionality and usability, as reported by system users.

A5. Make enhancements to and tune system performance.

A6. Discover, analyze, organize, and document application functional and data requirements.

A7. Design user interfaces for applications.

A8. Model and document data and processes related to application development.

A9. Design software components and develop application prototypes.

- A10. Build and debug application components using a variety of programming languages, professional tools, and integrated development environments.
- A11. Create and modify application designs to improve performance, security, and reliability of applications when in use.
- A12. Develop one-time and reusable applications to report and summarize application data.
- A13. Participate in statewide planning for application technology.
- A14. Assess and report status of application projects.
- A15. Work with business area customer groups to gather requirements for system use, output and updates.
- A16. Analyze business area requirements to determine feasibility of implementation and recommend justification for doing so, or design alternatives.
- A17. Plan and test upgrades to purchased software and applications.
- A18. Interface with managers and management teams presenting information about new or changed applications.
- A19. Approve the application's readiness for use.
- A20. Provide tertiary support services as necessary in the maintenance, updating, innovation, and security of ECB's website.
- A21. Provide tertiary support services as necessary for employee desktop and desktop application support.
- A22. Develop, maintain, and create reports from SQL databases.
- A23. Maintain and update data structure to ensure data integrity and backups and perform maintenance or trouble shooting on database as needed.
- A24. Ensure proper documentation of discrepancy reporting system, database, and all supporting updates, changes, or modifications.

25% B. BIT and BIT-Related Network (BITRN) Services

B1. Design, install, configure, monitor, troubleshoot, specify, acquire, implement, and upgrade the networking and IT components of all ECB's BIT and BITRN facilities, systems and equipment that support the enterprise's public media/broadcast function.

B2. Administer access to ECB's BITRNs.

B3. Maintain and ensure the availability of all centralized, decentralized, and remote BITRN services.

B4. Develop policies, procedures, and standards to ensure BITRNs are reliable and accessible.

B5. Document BITRN architectures, configurations, performance, problems, and assets.

B6. Research, test, and make recommendations for new, emerging, and/or upgraded BITRN technology, software, and hardware.

B7. Responsible for BITRN capacity planning and monitoring, and performance of BITRN servers, systems, equipment, and related software.

B8. Plan and manage changes to BITRNs.

B9. Establish requirements and specifications for BITRN hardware and software standards and acquisitions and develop bid specifications for these services and equipment.

B10. Provide network security recommendations as necessary to protect ECB's broadcast IT infrastructure.

B11. Manage software and firmware revision control of BITRN equipment.

B12. Interact with BITRN edge providers and constituents (WPR, NOAA, etc.) to maintain network security, accountability, and performance.

B13. Establish, maintain, and operate remote management facilities for BITRN equipment and systems.

B14. Achieve and/or maintain appropriate industry-standard certification as required separately in the incumbent's Performance Evaluation (PE).

B15. Analyze, troubleshoot, and resolve BITRN problems.

20% C. Provision of Operations Center systems technical Support

- C1. Install, test, calibrate, modify, and troubleshoot equipment, networks and systems.
- C2. In consultation with video promotions personnel, create professional-quality broadcast graphics, motion graphics, and text, ready for air; prepare scripts (to automate application), if necessary.
- C3. Coordinate automated playout of graphics above, through creation and set-up of macros to automate on-air presentation.
- C4. Create scripts and batch files to automate processes, where able and applicable.
- C5. Provide technical leadership, expertise, support, and training for operations personnel.
- C6. Create and disseminate documentation, reports, and drawings pertaining to the proper operation of OC systems.
- C7. Oversee the transcoding of data files for agency to ensure data integrity, consistency, and allow for future use in current and new technologies.

10% D. Provision of support to the Operations Center in completion of operational shifts necessary for assigned Master Control / Media Preparation shifts

- D1. Monitor and correct, if necessary, all inbound and outbound delivery systems and media (audio, video, data) to maintain error-free broadcast environment, FCC compliance, and within ECB standards.
- D2. Operate satellite downlink or uplink when required to accommodate airing and delay of various program feeds.
- D3. Properly process and/or append daily playlists into the broadcast automation system and make correction if necessary and report such issues in accordance with prescribed procedure.
- D4. Report and log problems and notify proper personnel, and log discrepancy reports if required.
- D5. Record media or transfer to appropriate encoding and server platforms.
- D6. Maintain all logs/documentation as required.
- D7. Back up the Transmission Operator and act as relief when necessary.

D8. Provide monitoring, training and process refinement to lower level technicians as necessary/assigned.

5% E. Miscellaneous job responsibilities.

E1. Maintain cleanliness at areas of responsibility.

E2. Perform other duties as assigned.

E3. Supervise the work of outside contractors.

Knowledge, Skills and Abilities

1. Knowledge of IT and networking standards as they pertain to broadcast infrastructure, systems and equipment.
2. Knowledge of all phases of systems development, from needs assessment and feasibility to system rollout and maintenance/refinement of the finished product.
3. Ability to creatively provide data-based solutions to systems-management problems
4. Knowledge of distributed database and data communications technology and capabilities.
5. Knowledge of telecommunications systems and technology
6. Knowledge of network security best practices.
7. Knowledge of Windows and Linux Server Administrator
8. Skill in basic programming skills for languages such as Python, Java, and Python, and scripting such as Bash, Shell script, action script, windows batch script or similar.
9. Knowledge professional video and audio operating standards.
10. Knowledge of current television master control workflows.
11. Knowledge of SQL database administration best practices.
12. Ability to adhere to, and knowledge of, all applicable federal health and safety practices (OSHA, FCA, etc.) and ECB requirements.
13. Ability to pay attention to detail.
14. Ability to communicate effectively, clearly and accurately in both written and verbal communications
15. Ability to provide clear, concise, and effective technical training
16. Ability to maintain effective working relationships with other professionals internal and external to the organization
17. Ability to work on multiple tasks simultaneously and independently
18. Ability to complete complicated tasks under time pressure

Special Requirements

- This position requires a variable, non-traditional work schedule including some nights and weekends.
- This position requires occasional standby or on-call status.